

SOUTHERN ENVIRONMENTAL LAW CENTER

200 WEST FRANKLIN STREET, SUITE 330
CHAPEL HILL, NC 27516-2520

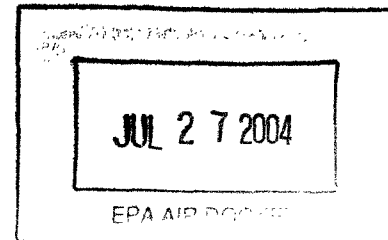
Telephone 919-967-1450
Facsimile 919-929-9421
selcnc@selcnc.org

Charlottesville, VA
Chapel Hill, NC
Atlanta, GA

June 28, 2004

VIA EPA ELECTRONIC DOCKET AND OVERNIGHT MAIL

Environmental Protection Agency
EPA Docket Center (EPA/DC)
Room B-102
U.S. EPA West
1301 Constitution Ave., NW
Washington, DC 20460
Attention: Docket ID No. OAR-2002-0056



Re: "Proposed Emission Standards for Hazardous Air Pollutants; and in the Alternative, Proposed Standards of Performance for New and Existing Sources: Electric Utility Steam Generating Units;" Proposed Rule, 69 Fed. Reg. 4652 (January 30, 2004) and Supplemental Notice, 69 Fed. Reg. 12398 (March 16, 2004) ("Utility Mercury Reductions Rule")

Dear Administrator Leavitt:

The Southern Environmental Law Center ("SELC") submits these comments in response to EPA's proposed Utility Mercury Reductions Rule, cited above. SELC, a non-profit, regional environmental organization dedicated to the protection of natural resources throughout the Southeast, has worked extensively on both air and water quality issues in the region and is greatly concerned about the threat mercury pollution poses to public health, the environment, the economy, and cultural heritage in the Southeast, particularly in our focus states of Virginia, North Carolina, South Carolina, Georgia, Tennessee, and Alabama.

For reasons discussed below, the population and environment of the Southeast are especially at risk from existing unacceptably high levels of mercury pollution. The problem is severe and persistent, and EPA's own information shows that in some Southeastern states it appears to be getting worse, not better. In North Carolina, for example, data from EPA's toxics release inventory reveals that, in the 2002 reporting year (the latest year for which data is available), mercury emissions from power plants rose an alarming 16 percent over emissions from the previous year. Mercury emissions and their attendant risk will continue to rise unless

EPA takes decisive action to immediately curb mercury emissions, especially from coal-fired power plants. Instead, EPA has proposed a Utility Mercury Reductions Rule that allows mercury emissions from these plants to continue unabated for years and requires only limited emissions reductions over the long term. If adopted as a final rule, in the Southeast region alone this proposal could unnecessarily place millions of people, thousands of acres of lakes, thousands of miles of stream, and a multibillion dollar economy at peril.

EPA's proposal to regulate hazardous air pollutants ("HAPs") emitted from coal-fired power plants through either a weak maximum achievable control technology ("MACT") standard or a cap and trade program is grossly deficient in several respects and flatly inconsistent with the requirements of the Clean Air Act ("CAA"), 42 U.S.C. §7401 *et seq.* (2004). Among other infirmities, the rule impermissibly attempts to regulate mercury emissions under §111 of the CAA rather than §112, the rule's MACT standard is far too weak, the cap and trade program is illegal and would likely exacerbate the mercury problem in many areas of the country including the Southeast, and the deadlines for implementing reductions are far too lax. Each of these problems is discussed in detail in a separate comment letter being submitted by the Clean Air Task Force ("CATF") and a host of other environmental organizations, including SELC. See Clean Air Task Force Comments dated June 28, 2004 and filed in this docket ("Joint Comments"). In particular, SELC urges EPA to follow the requirements of the CAA by rejecting the cap and trade option and by adopting the strong MACT standard advocated in the Joint Comments. Because this standard will result in over 90 percent reductions in mercury and other HAPs in three years or less, it represents the Southeast's—and, indeed, our nation's—best hope for curbing mercury pollution and the severe threats it poses to human health and the environment.

SELC submits these supplemental comments to the Joint Comments to highlight the unique threats faced in the Southeast from mercury pollution. While adoption of a strong MACT standard will provide crucial protection throughout the United States, it will perhaps most dramatically affect the health of people and places in the Southeast. As discussed below, the Southeast is plagued with high levels of mercury pollution, its environment is particularly vulnerable to the effects of that pollution, and its population depends for food, income, and cultural traditions on fish stocks that are now contaminated with mercury. EPA's own information reveals that mercury emissions from power plants is getting worse in three Southeastern states—Georgia, Alabama, and North Carolina—that already rank among the top 15 states with the highest power plant emissions. For all these reasons, the Southeast needs the protection afforded by a strong MACT standard, and it needs it now.

I. Mercury Pollution Poses a Particularly Severe Threat to Public Health, the Environment, the Economy, and Cultural Heritage in the Southeast.

A. Mercury Pollution from Coal-Fired Power Plants is Particularly Severe in the Southeast.

As EPA is well aware, domestic coal-fired power plants are the largest single source of mercury emissions in the United States, emitting approximately 45 tons of mercury into the air

every year, accounting for 40 percent of domestic mercury emissions.¹ A disproportionately high share of these emissions are generated in the Southeast. In the 2001 reporting year, emissions from power plants in the region comprised approximately 20 percent of the total mercury emissions from power plants across the United States.² The Southeast's high share of mercury emissions is directly attributable to the high number of coal-fired power plants in the Southeast, many of which are old plants with outdated pollution control equipment, and none of which specifically control for mercury emissions.

It should be no surprise, then, that states in the Southeast are among the top states nationwide for mercury emissions. EPA's Toxics Release Inventory for the 2001 reporting year reveals that 6 of the top 20 states with the highest mercury emissions from power plants are located within the Southeast region.³ Both Alabama and North Carolina are among the top 10 states with the highest mercury emissions from power plants, and Tennessee and Georgia are among the top 15. Within SELC's six-state focus region, 81 power plants reported emissions of mercury or mercury compounds totaling approximately 7 tons (14,579 lbs) in the 2001 reporting year. And, as is the case nationwide, coal-fired power plants constitute the major source of mercury emissions in the region. In fact, in the Southeast, coal-fired power plants contribute an even higher proportion of statewide mercury emissions. For example, electric utilities in Alabama, Tennessee, and Virginia are responsible for more than 60 percent of each state's mercury emissions. In North Carolina and Georgia, mercury emissions from power plants account for more than 70 percent of in-state emissions.

Mercury pollution from power plants is worsening in the Southeast, according to recently released Toxics Release Inventory data for 2002. Three of the 6 states in SELC's focus region experienced increased mercury air emissions during the 2002 reporting year. Mercury air emissions from electric utilities increased in Alabama, Georgia, and North Carolina, with North Carolina experiencing the most alarming increase—over 16 percent from the 2001 to the 2002 reporting year. As a result, the population and environment of these states badly need the protection of strict and immediate mercury emissions regulation.

B. The Unique Ecology of the Southeast Contributes to Mercury Contamination of Large Areas of Waterways and the Fish that Inhabit Them.

The Southeast is a region of abundant streams, lakes, wetlands, and coastal areas that historically have supported healthy populations of fish species as well as avian and mammalian species that depend on the fish for food. Unfortunately, the unique processes of the region also favor the conversion of airborne mercury into methylmercury, the form of mercury that contaminates fish and ultimately poses a severe threat to human health. When coupled with excessive mercury emissions, chiefly from coal-fired power plants, the region's natural vulnerability to these emissions results in much of the area's waterways being dangerously contaminated with mercury.

¹ EPA, National Emissions Inventory (1999).

² EPA, Toxics Release Inventory (2001). This figure includes emissions from Florida in addition to those from the states in SELC's focus region.

³ The six southeastern states falling within the top 20 states with the highest mercury air emissions from electric utilities are Alabama, North Carolina, Georgia, Tennessee, Florida, and Virginia.

In the Southeast, sources such as power plants emit airborne elemental mercury, a portion of which deposits in surface waters through dry or wet deposition. Mercury deposited in surface waters becomes toxic when it is converted to methylmercury by bacteria. Methylmercury concentrates (“bioaccumulates”) in the flesh of fish and other aquatic organisms, and threatens the health of people and animals who eat the fish. Unfortunately, the Southeast’s meteorology and the unique biogeochemistry of wetlands and blackwater rivers in Southeastern coastal regions favor methylmercury formation. The process leading to high rates of methylmercury formation in these waters works as follows: (1) Plentiful rainfall leads to high mercury deposition rates in many surface waters in the Southeast; (2) The chemical characteristics of many of these surface waters mobilizes the deposited elemental mercury, making it more available to the bacteria that generate methylmercury; and (3) Methylmercury generation is increased to an even greater extent by the proliferation of the methylmercury-generating bacteria in many southeastern surface waters.

Nearly half (48 million acres) of all wetlands in the United States are located in the Southeast, and wetlands comprise approximately 16 percent of the Southeastern United States (compared to only 5 percent of the lower 48 states overall).⁴ Often referred to as “sinks,” wetlands concentrate many environmental contaminants, including mercury.⁵ Moreover, biogeochemical processes in wetlands often enhance the bioavailability and mobilization of toxic chemicals such as mercury.⁶ Low pH, hypoxic and anoxic conditions, elevated dissolved organic carbon levels, and periodic flooding are only a few of the characteristics of Southeastern wetlands that contribute to the high rates of methylmercury generation in Southeastern coastal regions.⁷ Additionally, many surface waters originating in coastal regions of the Southeast are characterized by high methylation rates. These waters, termed “blackwater” due to their naturally dark tint, contain elevated levels of organic matter and are characterized by other conditions favoring proliferation of the bacteria that convert mercury to methylmercury.

Because of this unique biogeochemistry, methylmercury contamination has reached such high levels in many areas of the Southeast that marine and freshwater fish tissue samples routinely violate aquatic life and human health criteria. Federal and state agencies have issued numerous fish consumption advisories warning the public of the risks associated with eating certain fish that are high in methylmercury. Over time, these advisories have covered more fish species in more geographic locations and have urged the consumption of smaller and smaller amounts of affected fish. In fact, EPA and the Food and Drug Administration recently issued a joint advisory urging women and children not to consume *any* shark, swordfish, king mackerel,

⁴ Hefner, J.M., Wilen, B.O., Dahl, T.E., and Frayer, W.E. (1994). Southeast Wetlands: Status and Trends, mid-1970’s to mid-1980’s. U.S. Department of the Interior, Fish and Wildlife Service. The authors define the Southeast as North Carolina, South Carolina, Alabama, Georgia, Mississippi, Florida, Louisiana, Arkansas, Tennessee, and Kentucky.

⁵ Lacerda, L.D., Fitzgerald, W.F. (2001). Biogeochemistry of mercury in wetlands. *Wetlands Ecology and Management* 9: 291-293.

⁶ *Id.*

⁷ Snodgrass, J.W., Jagoe, C.H., Bryan, A.L., Brant, H.A., Burger, J. (2000). Effects of trophic status and wetland morphology, hydroperiod, and water chemistry on mercury concentrations in fish. *Canadian Journal of Fisheries and Aquatic Sciences* 57: 171-180.

or tilefish.⁸ The joint advisory also warned women and children against consuming more than one meal per week of white albacore tuna.⁹ Similarly, Southeastern states have issued strong advice against consumption of certain marine fish species. North Carolina, South Carolina, Georgia, and Florida have jointly urged all members of the public to avoid consuming any Atlantic king mackerel measuring over 39 inches in length.¹⁰ South Carolina further advocates avoiding consumption of any swordfish caught in the state's coastal waters.¹¹

Some species of commonly consumed freshwater fish suffer from high methylmercury levels as well. All six states within SELC's focus region have issued fish consumption advisories based on methylmercury levels in bowfin, largemouth bass, chain pickerel, catfish, and sunfish.¹² Moreover, as a result of the methylmercury loading in the region's waterways, hundreds of miles of rivers, lakes, and coastlines in the Southeast are listed as impaired under Section 303(d) of the Clean Water Act due to high fish tissue methylmercury levels. For many of these waters, atmospheric deposition is the primary or sole source of mercury contamination.¹³ Because air sources cannot be effectively regulated under the Clean Water Act, restoring these surface waters necessitates a Utility Mercury Reductions Rule that incorporates a strong MACT standard.

C. Methylmercury Contamination in Fish and Shellfish Poses a Significant Threat to Public Health in the Southeast.

It is well established in the scientific literature that mercury contamination in fish and shellfish threatens human health. The commonly identified at-risk populations are fetuses and breast-fed babies, who may be exposed to mercury when their mothers eat mercury-tainted fish, and children, whose central nervous system development may be compromised by ingesting mercury-laden fish directly. Fetuses, breast-fed infants, and children exposed to methylmercury are at risk for lowered intelligence and learning disabilities. However, new research suggests that low-level exposure to methylmercury is also associated with adverse effects in adults. For example, adults exposed to methylmercury through consumption of contaminated fish may experience blurred vision as well as numbness of lips, tongue, fingers, and toes¹⁴ and – alarmingly – may be at higher risk for cardiovascular disease and infertility. Moreover, because methylmercury has a half life of approximately six months in the body, eliminating the risk of these adverse effects essentially requires eliminating dietary sources of methylmercury.

Thus far, state and federal government agencies have relied on fish consumption advisories to try to protect people from the harmful health effects of mercury. As discussed above, all the states in SELC's focus area, as well as the EPA and the FDA, have issued

⁸ EPA and FDA, *Joint Federal Advisory for Mercury in Fish* (2004).

⁹ *Id.*

¹⁰ See www.epa.gov/waterscience/fish/states.htm.

¹¹ *Id.*

¹² *Id.*

¹³ See North Carolina Department of Environment and Natural Resources, Division of Water Quality, *2004 303(d) and 305(b) Draft Report* (2004) (identifying atmospheric deposition as the primary source of mercury contamination in impaired waters located in the Roanoke and Chowan Basins).

¹⁴ Williams, Luanne K., *Health Effects of Methylmercury and North Carolina's Advice on Eating Fish* (March 2004). North Carolina Department of Health and Human Services (March 2004).

warnings against consuming various freshwater and saltwater fish species. However, fish consumption advisories do not go far enough to protect the public health. The answer to the problem of mercury emissions and their health consequences is not to continue to identify fish species after fish species that cannot be safely eaten. The answer is to slash mercury emissions so that fish populations have a chance to recover from mercury loading. Fish advisories are, at best, a stopgap measure best suited to stemming the immediate damage to public health while strong mercury emissions controls are put into place. Particularly in the Southeast, where fish and seafood represent a significant component in the diet of many populations, the health of the community depends on mercury pollution being controlled at the source.

The fish advisory system has many limitations, and is not adequately protecting public health in the Southeast. In this region, fishing provides an inexpensive source of sustenance for many communities, including low-income populations. For these vulnerable populations, economics may demand that they continue to eat the fish they catch, regardless of whether the government has advised against doing so. For example, the United States Department of Health and Human Services conducted a 1995 study assessing the health of subsistence fishermen in the Florida Everglades. The study found that nearly 30 percent of those surveyed were unfamiliar with the mercury consumption advisories issued for the waters in which they fished.¹⁵ Moreover, of those who were aware of the fish advisories, nearly 75 percent failed to change consumption patterns in response.¹⁶ And the risk is not limited to subsistence fishermen. Coastal residents throughout the Southeast may be exposed to unsafe levels of methylmercury because their diets are especially high in fish and shellfish. For example, an investigative study in Alabama found extremely high levels of mercury in hair samples from southeastern residents who consume seafood and fish every week,¹⁷ indicating elevated mercury levels in their bodies overall. This study, as well as the Florida study of subsistence fishermen, highlights the severity of the problem of mercury exposure in the Southeast, as well as the importance of controlling mercury air emissions, before the mercury makes its way into fish stocks and ultimately to the human population.

D. Methylmercury Contamination in Fish Threatens Sensitive Wildlife Species in the Southeast.

Mercury pollution in the Southeast threatens not just human health, but also the health of animal species that rely on fish for food. Methylmercury in fish poses a threat to several threatened, endangered, or sensitive species in the Southeast. For example, high levels of methylmercury have been found in endangered Florida panthers inhabiting the Everglades; according to the Florida Fish and Wildlife Conservation Commission, at least one panther has died from methylmercury poisoning and the species' declining fitness is at least partially

¹⁵ United States Department of Health and Human Services, *Health Study to Assess the Human Health Effects of Mercury Exposure to Fish Consumed from the Everglades* (1995).

¹⁶ *Id.*

¹⁷ Raines, B., *Hair Tests Indicate High Mercury Levels*, The Mobile Register (September 30, 2001).

¹⁹ Florida Panther Net, <http://www.panther.state.fl.us/handbook/threats/mercury.html>.

attributable to methylmercury exposure.¹⁹ Consumption of methylmercury-contaminated fish has also been linked to the decline of mink in Georgia, North Carolina, and South Carolina.²⁰

Yet methylmercury exposure poses perhaps the greatest threat to the many species of birds that rely on fish from highly contaminated waters as a primary food source. Serious developmental defects have been observed in both loon and great egret nestlings exposed to high levels of methylmercury.²¹ Similarly, a 2002 risk assessment determined that a potential for risk from methylmercury exposure exists for the endangered wood storks who feed in unique wetland areas called Carolina bays along the Savannah River in Georgia.²²

In the face of such documented health effects on sensitive wildlife populations in the Southeast, it is imperative that EPA adopt a strong Utility Mercury Reductions Rule that protects these populations and their food sources.

E. Methylmercury Contamination in Fish and Shellfish Threatens the Southeast's Commercial Fishing and Sportfishing Industries and Chills One of the Region's Most Deeply-Rooted Traditions.

Mercury pollution poses not only health threats to humans and animals, it also places a major facet of the Southeast region's economy and culture at risk. Fishing is a key industry in the southeastern United States, and over time it has become a strong cultural tradition for many in this region. Sportfishing contributes billions of dollars each year to the Southeast's economy, stimulating retail sales, supporting jobs, and providing tax revenue.²³ Sportfishing is also a vital component of the tourism industry in the Southeast. Florida and North Carolina rank first and second on the American Sportfishing Association's list of top fishing destinations.²⁴ Non-resident anglers contribute an estimated \$1.5 billion to Florida's economy and an estimated \$7 million to North Carolina's economy annually.²⁵ Commercial fishing is also a significant contributor to the economy of the Southeast. In 2002, commercial landings in SELC's six-state focus region generated approximately \$300 million dollars.²⁶ Mercury contamination in fish and seafood threatens the livelihood of independent and commercial fishermen and could drastically impact state economies in the Southeast. But the adverse impacts of mercury contamination extend beyond economic concerns. Many people in the Southeast have historically made their living or spent their recreational time on the region's waters. Mercury contamination of fisheries

²⁰ Osowski, S.L. (1995). The decline of mink in Georgia, North Carolina, and South Carolina: the role of contaminants. *Environmental Contamination and Toxicology* 29: 418-423.

²¹ Nocera, J.J. and Taylor, P.D. (1998). *In situ* behavioral response of common loons associated with elevated mercury (Hg) exposure. *Ecology* 2: 10; Spalding, M.G., Frederick, P.C., McGill, H.C., Bouton, S.N., and McDowell, L.R. (2000). Methylmercury accumulation in tissues and its effects on growth and appetite in captive great egrets. *Journal of Wildlife Diseases* 36: 411-422; Spalding, M.G., Frederick, P.C., McGill, H.C., Bouton, S.N., Richey, L.J., Schumacher, I.M., Blackmore, C.G., and Harrison, J. (2000). Histologic, neurologic, and immunologic effects of methylmercury in captive great egrets. *Journal of Wildlife Diseases* 36: 423-435.

²² Brant, H.A., Jagoe, C.H., Snodgrass, J.W., Bryan, A.L., and Gariboldi, J.C. (2002). Potential risk to wood storks (*Mycteria Americana*) from mercury in Carolina Bay fish. *Environmental Pollution* 120: 405-413.

²³ See American Sportfishing Association, *Sportfishing in America: Values of our Traditional Pastime* (2002).

²⁴ *Id.*

²⁵ *Id.*

²⁶ National Marine Fisheries Service, Fisheries Statistics and Economics Division, 2002.

threatens the way of life of many individuals in the Southeast, and could force many to abandon traditions rooted deeply in their familial and cultural identities.

II. A Strict MACT Standard for Emissions from Power Plants is Necessary to Curtail Local and Regional Emissions and to Prevent the Development of Mercury Deposition Hotspots.

A. In-State and Regional Mercury Emissions Contribute Significantly to Mercury Deposition Hotspots in Southeastern States.

Some industry commenters have suggested that mercury emissions do not contribute to localized “hotspots” because elemental mercury travels far from the source before “falling out” as wet or dry deposition. However, mercury deposition modeling performed by EPA strongly suggests that in-state and regional sources of mercury emissions contribute significantly to high levels of mercury deposition in Southeastern states. Four of the top 10 most severe mercury “hotspots,” locations where mercury deposition is highest, are located in the Southeastern states of Florida, North Carolina, South Carolina, and Tennessee. EPA’s REMSAD model indicates that in-state sources contribute: (1) almost 70 percent of the mercury deposited at Florida’s most severe hotspot; (2) 58 percent of the mercury deposited at South Carolina’s most severe hotspot; and (3) 55 percent of the mercury deposited at North Carolina’s most severe hotspot.²⁷ Moreover, a substantial percentage of the mercury emitted in each Southeastern state that is not deposited in-state deposits within the Southeast region. Approximately 40 percent of the mercury emitted in North Carolina that is not deposited in-state deposits somewhere in the Southeast, with one quarter of those emissions depositing in neighboring South Carolina.²⁸ Similarly, approximately 50 percent of the mercury emitted in South Carolina that is not deposited in-state deposits within the Southeast region, with 27 percent of those emissions depositing in Georgia and 12 percent of those emissions depositing in North Carolina.²⁹

Regulating mercury emissions under a cap-and-trade system has great potential to exacerbate mercury contamination at many sites in the Southeast by allowing large power plants within the region to continue emitting large amounts of mercury into the atmosphere—mercury that, by and large, will stay in the Southeast. EPA should remedy existing hotspots, and avoid future, more severe hotspot problems, by adopting a strong Utility Mercury Reductions Rule that requires power plants to adopt maximum achievable control technology (MACT).

B. Immediate, Substantial Reductions in Mercury Emissions from Coal-Fired Power Plants Will Translate into Lower Levels of Methylmercury in Fish.

While the problem of mercury pollution is extremely serious and mercury itself is a highly persistent toxic, EPA can effectively mitigate the problem through immediate, strong controls on coal-burning power plants. EPA’s own information makes the case. Recently, the results of the EPA “Mercury Maps” modeling study established a quantitative link between

²⁷ EPA, *Draft Mercury REMSAD Deposition Modeling Results* (2003).

²⁸ *Id.*

²⁹ *Id.*

levels of mercury deposition from the air and methylmercury levels in fish tissue.³⁰ Using site-specific data on mercury deposition rates and fish tissue methylmercury concentrations, the study estimated the percent reductions in air deposition load necessary to meet EPA's fish tissue criterion for methylmercury (0.3 mg/kg). Coastal regions along the Gulf of Mexico and southern Atlantic were estimated to require *over a 75 percent reduction* in air deposition rates to meet the new criterion.³¹ Although opponents of a strict MACT standard for power plant emissions may claim that eliminating utilities' mercury emissions will have little positive effect on mercury contamination issues, real-world observations from the Southeastern United States show that reducing mercury emissions from domestic sources will result in both lower atmospheric deposition rates and lower methylmercury levels in fish and wildlife. In North Carolina, for example, lower atmospheric mercury concentrations recorded at the Lake Waccamaw deposition monitoring station have coincided with substantial reductions in mercury use at a near-by chlor-alkali plant.³² In Florida, stringent MACT regulation of mercury emissions from in-state waste incinerators correlated with a 75 percent decrease in mercury levels in largemouth bass and great egret in the Everglades.³³ Similar observations have been recorded at sites elsewhere in the United States.³⁴ Thus, a strong Utility Mercury Reductions Rule can and will make a difference in the mercury levels in fish populations in the Southeast.

Conclusion

For all the reasons contained in the Joint Comments and these supplemental comments, it is imperative that EPA take this opportunity to aggressively regulate mercury emissions from coal-fired power plants in the Southeast and throughout the United States. The Southeast is at increased risk from mercury pollution because of the region's high level of mercury emissions, especially from coal-fired power plants, the region's unique natural processes that encourage methylmercury formation, the documented harms from mercury pollution to public health and the environment in the region, and the reliance of the region's economy and cultural traditions on healthy fisheries. Evidence shows that a strong mercury rule can and will remedy these problems.

We urge EPA to adopt a final Utility Mercury Reductions Rule that contains no cap and trade option and requires power plants to implement a strong MACT standard as soon as possible.

³⁰ EPA, Office of Water, *Mercury Maps: A Quantitative Spatial Link Between Air Deposition and Fish Tissue* (September, 2001).

³¹ *Id.*

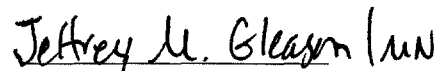
³² North Carolina Department of Environment and Natural Resources, Division of Air Quality, *Long-term Atmospheric Mercury Trends in Eastern North Carolina: Relationships between Local Source Activities and Ambient Air Mercury Concentrations*, at 6.

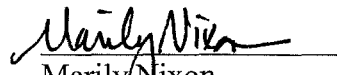
³³ Florida Department of Environmental Protection, *Integrating atmospheric Mercury Deposition with Aquatic Cycling in South Florida: An Approach for Conducting a Total Maximum Daily Load Analysis for an Atmospherically Derived Pollutant*, at 56 (October, 2002) (revised November, 2003).

³⁴ See Hrabik, T.R., Watras, C.J. (2002). Recent declines in mercury concentration in a freshwater fishery: isolating the effects of de-acidification and decreased atmospheric mercury deposition in Little Rock Lake. *Science of the Total Environment* 297: 229-237.

We thank you for the opportunity to submit these comments.

Respectfully submitted,


Jeffrey M. Gleason
Deputy Director


Marilyn Nixon
Staff Attorney

On Behalf of Southern Environmental Law Center